

From qrp-l@lehigh.edu Sat Sep 23 10:07:00 1995  
From: Glen Leinweber <leinwebe@mcmail.CIS.McMaster.CA>  
Subject: [3369] ANOTHER qrp logo  
Message-ID: <1995Sep22.144420-0400@[130.113.234.7]>

Gang,

Well, I've resisted till today, and in a moment of weakness, submitted another QRP-L logo.

This post is sort of a disclaimer, that the 2nd logo is a light-hearted attempt - a little self-defacing humour. Hope you-all take it in the same spirit. Anyway, donning this comfortable 'ol flame suit once again, just in case.

ObQRP:

A major project is in the works - a 30 meter transceiver, a new homebrew design. Trying to use easy-to-get parts so it could be made by others. Too early to tell all about it, since the design is still in a state of flux (pun intended).

72, Glen Leinweber VE3DNL leinwebe@mcmaster.ca

From qrp-l@lehigh.edu Sat Sep 23 10:07:00 1995  
From: Mark D Jarmuz <jarmuz@acsu.buffalo.edu>  
Subject: [3377] F/S argonaut II.....  
Message-ID: <Pine.SOL.3.91.950922203124.24330A-100000@orichalc.acsu.buffalo.edu>

hi gang.....

have for sale here tentec argonaut II with tentec 937 power supply(7amps),and tentec 705 desk mic....all in excellent condx...includes manual,boxes...etc....  
950.00 firm...reply via email or call me at 716-826-7740...

dave..AA2PF.....

P.S.im the original owner....

From qrp-l@lehigh.edu Sat Sep 23 10:07:00 1995  
From: "Arjen Raateland, SYKE/YV, puh. 90-4030 0457" <Arjen.Raateland@vyh.fi>  
Subject: [3365] KC-1 keyer/counter  
Message-ID: <01HVL1X0DVQA91WE2X@vyh21.vyh.fi>

My KC-1 from Wilderness Radio arrived a few days ago. No hurry to assemble as I'm waiting for a Sierra from the same place.

On studying the documentation and reading the article by the designer of the KC-1 in QRPP I noticed that the current version of the KC-1 has done away with the divider IC (something like 74HC..20).

When I look at the PC board I wonder how a second IC ever might have fitted, but there must be an other reason for not having the separate divider IC ;-). The KC-1 certainly is a very smart design. I remember that the designer mentioned in a message to this group that he had an unused output on the PIC IC. In the kit I got there is an auxiliary switching output for anything the user cares to switch. So thoughtful! One would expect this to be a very succesful product.

I have a suggestion to make to anybody who builds the KC-1. The regulator 78L05 takes about 4 mA of quiescent current. It could be replaced by a similar regulator IC LP2950 that has only 75 microAmps quiescent current, but similar maximum load current data as a 78L05. Four milliamps is still a lot of current to waste if the total current consumption of a rig is only 35 mA!

Unfortunately I haven't been able to get any LP2950's yet, but for small CMOS circuits like the KC-1 they should be just the thing to use.

73 de OH2ZAZ

Arjen Raateland  
Suomen Ymp ristökeskus / YV  
---... --- --... . --- ..... ..--- ---... ..- ---...  
Finnish Environment Agency, Helsinki, Finland  
SAS Support  
EMAIL: Arjen.Raateland@vyh.fi  
tel. +358 0 4030 0457  
fax +358 0 4030 0490  
-.-. -.-

From qrp-1@lehigh.edu Sat Sep 23 10:07:00 1995  
From: jaydhall@everest.iccy.com  
Subject: [3371] Pixie 2  
Message-ID: <95Sep22.132039mdt.17032@gabriel.iccy.com>

I had purchased a pixie 2 right before I ordered my OHR Explorer.  
I put the OHR together first and then had to use it for a while.(!)

Last night I 'finished' the pixie 2. I fired it up and  
Hmmm. no output.. Osc is OK..Output transistor is warm... Oh,  
swaped inductor with keyer input. Duh... Swaped back..

Hmm... output (7040MHz) is not stable into dummy load.. Aha!  
output filter had broken track. Place solder bridge to fix it..  
(they can hurt, they can help) Output looks great on scope!  
Sounds great on my TS 440 RX... Lets connect headphones.. Cool!  
hear CW! (Also KOA.. hope I can get rid of that!) Great fun! Now  
all I need to do is encapsulate it and get it on the air!

WA6MOK  
Jay D. Hall  
jaydhall@iccy.com

From qrp-1@lehigh.edu Sat Sep 23 10:07:00 1995  
From: Bob Stafford <bstaffor@dialin.ind.net>  
Subject: [3367] Qrp Design  
Message-ID: <199509221503.LAA61146@nss2.CC.Lehigh.EDU>

-- [ From: Bob Stafford \* EMC.Ver #2.5.02 ] --

I finally got to check the qrp-1 designs and they all look great. I vote  
for AA7QY's because of its simplicity.

bob N9USD

From qrp-1@lehigh.edu Sat Sep 23 10:07:00 1995  
From: JEGGER <E7E3EGG@TOE.TOWSON.EDU>  
Subject: [3366] Thanks re Scout/TS-50S  
Message-ID: <01HVKNSR9AJW9VVN6N@TOE.TOWSON.EDU>

I hope you guys don't mind if I express my thanks to all of you  
simultaneously for your time, experience, and advice comparing these  
two rigs. There were about a dozen responses, ranging from short notes  
to some detailed comparisons of features.

Overall the Scout came out pretty well; I DO have somewhat of a  
pro-TenTec bias, as I suspect many on this list may share. But it seems  
as if the Scout has some quirks (perhaps expected on so inexpensive a  
rig), and a couple of respondents conveyed some real horror stories with  
it.

My inclination is to check to see if the 30-day return privilege  
advertised for the Omni 6 also applies to the Scout, and give it a try.  
Someone who's regular main rig is a Century/21 probably won't miss the  
menu and memory features!

Thanks very much, guys -- I'm very impressed by your willingness to  
help. -- John, K3GHH

From qrp-1@lehigh.edu Sat Sep 23 10:07:00 1995  
From: Rick Zabrodski <zabrodsk@med.ucalgary.ca>  
Subject: [3379] Visiting Montreal and Toronto  
Message-ID: <Pine.SUN.3.91.950923071451.19478A@ume>

I will be at the Hotel Bonaventure Hilton in Montreal Sept 24 thru 29 and then the Skydome Hotel in Toronto Sept 30 thru Oct 3.  
If anybody works down town or would like to have an eyeball qso with a qrp westerner I can be reached at the above locations.  
Will miss the first fox but I figure you guys need a break....just finished setting up my 40 meter delta loop aimed on Texas!

Dr. Rick Zabrodski BSc, MD, CCFP(E)	*	VE6GK
Email: zabrodsk@med.ucalgary.ca	*	NorCal 519 ARCI 7650 GQRP 8329
Phone 403-271-5123 Fax 403-225-1276	*	"Power is no substitute for skill"

From qrp-1@lehigh.edu Sat Sep 23 10:07:00 1995  
From: K5ERJ@aol.com  
Subject: [3378] What Logos?  
Message-ID: <950923063515\_106706357@emout06.mail.aol.com>

I hate to beat a dead horse, but I have still not been successful in getting a look at the Logos on file.

If there is anyone on America Online that has been successful with ftp and with getting a look at any of the thousands of Web pages via AOL, I would certainly like to know the secret.

AOL's web browser does little to explain how to surf the web for pages other than what they have online. I still haven't a clue as to how to use the FTP function.

Can anyone help?

73  
Ed K5ERJ            Reply to: K5ERJ@aol.com

P.S. The OHR Classic is 2/3 wired! I'm getting antsey!

From qrp-1@lehigh.edu Sat Sep 23 10:07:00 1995  
From: Thom <thom@li.net>  
Subject: [3370] Re: 30M log summary  
Message-ID: <Pine.SUN.3.91.950922154931.27670A-100000@linet01>

Hi Chuck,

Congratulations on your 30 meter results...I'm considering an end-fed longwire but all the literature tells me no...your results tell me "Yes".

And only 5meters up!! Can you tell me how long your long wire is and anything else abt it.

Thanks es 73  
de Tom  
WB2QDG

From qrp-1@lehigh.edu Sat Sep 23 10:07:00 1995  
From: JCoote@aol.com  
Subject: [3375] Re: comments on hidden antennas  
Message-ID: <950922195519\_106339488@emout05.mail.aol.com>

Just some thoughts on why random wires sometimes appear to have lesser results than dipoles in concealed applications...

If you look at a typical random wire antenna system, it normally consists of the antenna and a counterpoise. It is a lot like a dipole with uneven leg lengths and a tuner right at the feedpoint.

Sometimes the counterpoise is misunderstood and treated like a lightning or safety ground, rather than the radiating element it is supposed to be.

Another downside to some random wire installations is that some or much of the antenna (and counterpoise, don't forget) run indoors or parallel to objects that hurt the performance of the antenna. Electrical wiring, aluminum siding, plumbing, aluminum-backed insulation, cable TV, re-bar, metal flashing, metal mesh in stucco are just a few. Try to visualize an x-ray view of your building with all the metal and RF absorbing objects in it.

Dipoles fed with balanced or coax line will sometimes outperform random wires because both legs of the antenna are up higher or in the clear, less RF goes

into heating the building.

I find that coax-fed dipoles are difficult in concealed use. Often the antenna has to be closer to other objects than desired so there will be a lot of pruning to find that 50-ohm match is not possible. We don't want to be seen pruning the antenna and coax, baluns, etc may be highly visible. The use of a coax feed restricts us to one band per antenna. I would advise removing the coax and feeding with TV line and a tuner for multiband use.

Exact length and resonance does not seem to matter if the dipole legs are at least 1/4 wavelength on the lowest band used and if the tuner loads the antenna on all bands. Ancient ham articles suggesting 67' or 135' dipoles for balanced feed date back to the 1930's and 1940's when finals were harmonically related and push-pull into balanced, high-impedance line. I don't suggest feeding a multiband dipole through coax, it would "radiate" more than balanced line and have more loss.

73, Jay  
WB6AAM

From qrp-1@lehigh.edu Sat Sep 23 10:07:00 1995  
From: JEVERHART@cayman.vf.mmc.com  
Subject: [3372] Re: MFJ CWF-2  
Message-ID: <950922162049.20a0c569@carib.vf.mmc.com>

Gang,

I've been reading the byplay about the MFJ CWF-2 the last day or so. I think I have an extra (can you believe it?). If I do, I'll take it with me tomorrow to the York (PA) hamfest. You will probably find me several times during the day hanging around the QRP ARCI contingent. If it doesn't go there, I'll be open to offers on qrp-1. In the next week or so, I'll be listing other QRP goodies I have to let go, including a Ten-Tec Century 21, an MFJ 9040 and a Ten-Tec SWR meter. In the meantime, if you are interested, look me up at the York hamfest or send private e-mail to me.

TKS and 72/73,

Joe E., N2CX

e-mail: jeverhart@cayman.vf.mmc.com

From qrp-1@lehigh.edu Sat Sep 23 10:07:00 1995  
From: Mike Robinson <miker@cc.com>  
Subject: [3364] Re: QRP ant tuners  
Message-ID: <9509221417.AA00317@voder.nsc.com>

It's the plate spacing that will determine the power capacity. The tuner kit I got from Dan's Small Parts, (who?), a long time ago, had capacitors with spacing on the order of 1MM. The tuner can handle up to a recommended 10watts. I've never had it above 2watts. My understanding is that you'll get arcing if the power capacity is exceeded.

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=====
7.3 de Michael aa0ub          | QRP:
miker@cc.com                 Norcal #857 | "UR HB 5W FB 72"
=====
Take a look at:
http://www.acs.oakland.edu/oak/SimTel/msdos/hamradio.html
=====
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From qrp-1@lehigh.edu Sat Sep 23 10:07:00 1995  
From: PA3ASC@bonny.hol.nl (M. Perry)  
Subject: [3368] Re: QRP antenna tuners.  
Message-ID: <199509221948.UAA23282@bonny.hol.nl>

Hi folks.

I've was not able to watch this newsgroup until a few days ago, so this makes me a "newbie" (is that the word?). Maybe I should watch a little longer before I jump into words, but the subject of antenna tuners is dear to our heart, so here goes...

About 15 years ago, I built an ATU comprising a pi-circuit using an Amidon/MicroMetals T-200 50 core and two (3x500 pF) air-spaced variable capacitors, the kind they used in the old fire-bottle broadcast receivers. This tuner has worked a treat as a QRP ATU for a HW8 all these years and the core inductor did its job well.

Michael AA0UB has raised the question of power handling capacity of an ATU.

---snip

> It's the plate spacing that will determine the power

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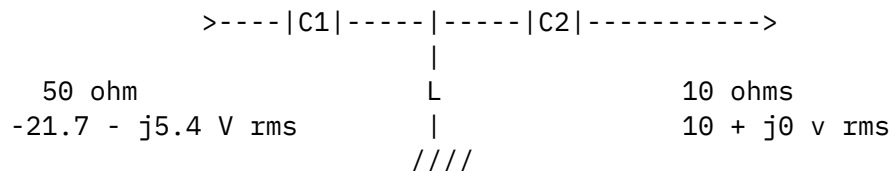
> capacity. The tuner kit I got from Dan's Small Parts,
> (who?), a long time ago, had capacitors with spacing
> on the order of 1MM. The tuner can handle up to
> a recommended 10watts. I've never had it above
> 2watts. My understanding is that you'll get
> arcing if the power capacity is exceeded.

> =====
> 7.3 de Michael aa0ub | QRP:
> miker@cc.com Norcal #857 | "UR HB 5W FB 72"

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The risk of capacitor breakdown in an ATU is driven by the circuit configuration as well as the SWR and the power throughput.

Now the tee-circuit is a very popular ATU configuration, mainly because it can get a match at low frequencies (eg On 80 meters) using quite small (i.e. cheap) variable capacitors, typically 350 pF. To get an idea of the voltages and currents involved, I did some calculations for a Tee-circuit matching 50 ohms to a 10 ohm resistive load, which dissipated a power of 10 watts.  
(This diagram looks better in Courier font)



Now 350 pF has an impedance of about 120 ohms at 3.5 MHz.  
To get a match on 80 metres, we need  
Xc2 = -j132.5 ohms; Xc1 = -293 ohms  
XL = 92.5 ohms and the phase shift was 166 degrees.  
For this configuration, the voltage accross the inductor is (10 - j133) volts rms; The voltage accross a capacitor is accross C2 : 133 volts rms = 188 volts peak.

Now although the breakdown voltage of dry air is about 3kV per mm (75 kV per inch), intuition suggests allowing a safety margin and working to 1 kV per mm in case the air is humid, the capacitor dirty etc. Thus in this example, we could even go up to 100 W (583 volts peak) and still be a long way from flash-over. It is of course not certain that this specific example represents the worst case situation which the Tee-circuit could encounter, but it indicates the kind of thing which is going on in a tee-match.



One should spare a thought for the inductor. The current through this component, at 10 watts throughput will be approximately  $133 \text{ volts} / 92.4 \text{ ohms} = 1.4 \text{ amps}$ .

If the inductor has a Q of 100, then its resistance will be 1 ohm and it will dissipate about 2 watts - 20% of the power. At 100 watts throughput, the losses will climb to about 20 watts, and the inductor will get rather warm. These loss calculations are approximate because the Q of the inductor also affects the tuning of the tee circuit for a good match, but not so much that it significantly alters the main conclusion.

In the case of a Pi circuit, the voltages accross the capacitor are lower, but the capacitors need to have a very high value, up to 1500 pF or more for 80 metres. And there is still a hefty current through the coil.

Hope this all helps.  
Have a nice week end.  
73 de PA3ASC.

Regards,  
Mike Perry. [e-mail :- PA3ASC@mailbox.hol.nl ]

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"The more memory you provide a computer programmer,  
the more of it he fritters away." (unknown software guru, 1967)

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From qrp-1@lehigh.edu Sat Sep 23 10:07:00 1995  
From: JCoote@aol.com  
Subject: [3376] Re: random lngth wire  
Message-ID: <950922195510\_106339369@mail02.mail.aol.com>

You don't have to use enameled copper or magnet wire. Stranded wire with an appropriate color of plastic insulation will work equally well. If you're running a low-profile antenna the magnet wire would be too shiny.

The thickness of the wire depends on how much weight the wire has to support. If you are going to use huge insulators and thick ropes that will add to the weight and stress on the wire. If the wire is supported by several trees or other objects it needn't be as strong. If all 150 feet are stretched between two supports then it must be stronger.

In one concealed HF operation we had to operate from the 12th floor of a

building. I used a telescoping aluminum mast to get my wire out and away from the building. From the tip of the mast I dangled about 70 feet of #26 stranded gray wire with just enough weight on the end of the wire to pull it straight and keep it from blowing too much. We used 100 watts SSB and data.

73, Jay  
WB6AAM

From qrp-1@lehigh.edu Sat Sep 23 10:07:00 1995  
From: jlowman@iepsnet.com (Jim Lowman)  
Subject: [3373] Re: Wife  
Message-ID: <199509222042.QAA80955@nss2.CC.Lehigh.EDU>

>Well, after much, goading, cajoling and pestering, I am pleased to  
>announce that from here on out my wife will now be referred to as  
>KE6YNW!! It's a beautiful thing...now she's working on her code  
>so that she can get her hands on the explorer she bought me.

Congratulations to your wife! Mine has wanted to be a ham since she saw Field Day back in '66. She just got her call, KE6YBS, and wants to study her code so she can work 10M for our club's FD next year.

It's too bad that more wives don't get involved in the hobby; maybe they see radio/electronics/computers as a "guy" thing. At our VE session last Saturday, not only did a high-school kid pass his Extra code and Advanced theory exams, but his mother also got her Tech. Dad is already an Extra. Seems like most women are either indifferent to the hobby, or absolutely hate it.

73...Jim...KF6CR

From qrp-1@lehigh.edu Sat Sep 23 10:07:00 1995  
From: cebik@UTKVX.UTCC.UTK.EDU  
Subject: [3374] Re: Wife  
Message-ID: <Pine.PMDF.3.91.950922194228.543487286B-100000@utkvx.utk.edu>

Jim,

There are more wives in ham radio than most folks believe. Contrary to popular belief, it is we males who yack the most and hence seem to dominate the hobby. But it is many a YL who has lent to ham radio consummate skill and dedication, whether up front on the firing lines or

quietly behind the scenes, to make it easy for us to yack. to all of them, my thanks.

-73-

LB, W4RNL